

GOOS Center Coordinates NOAA's Research Data

Robert L. Molinari



Researchers deploy a PALACE float which will collect upper ocean temperature data in the North Atlantic Ocean.

The Global Ocean Observing System (GOOS) Center was established at AOML to coordinate NOAA's diverse global observing projects. The Center is an amalgamation of the existing AOML Global Drifter Center and the Upper Ocean Thermal Center.

The initial objectives of the GOOS Center are directed at coordinating NOAA's global and regional observing network efforts to maximize the quality and quantity of data available to users, evaluating new observing methods for incorporation into existing networks, and interacting with other national and international groups to coordinate GOOS activities.

NOAA's present global operations include the AOML managed: (1) Volunteer Observing Ship (VOS) network that provides surface marine meteorological observations; (2) a VOS network that provides upper ocean temperature data; and

GOOS Center Director Awarded Senior Scientist Appointment

Dr. Robert L. Molinari, Director of the Global Ocean Observing System (GOOS) Center, was appointed to the position of Senior Scientist on August 2, 1998 by NOAA Administrator Dr. D. James Baker.

Senior scientist appointments are awarded to individuals who have achieved a national and/or international reputation in their field and involve performance of high-level research and development in the physical, biological, medical, or engineering sciences.

Within the NOAA organizational structure there are only 35 Senior Scientist positions. Once appointed to the Senior Scientist level, the position is retained until retirement. Dr. Molinari is the ninth individual within NOAA's Office of Oceans and Atmospheric Research to attain Senior Scientist status.

Bob received his Ph.D. in oceanography from Texas A&M University in 1970. He began his career with NOAA in December 1970 when he joined the staff of AOML's Physical Oceanography Division as a National Research Council postdoctoral research associate. Since then, he has held the position titles of Research Oceanographer and Supervisory Oceanographer. He was the Director of the Physical Oceanography Division from 1993-1997. In 1997, he resigned as Division Director to become Director of the newly formed Global Ocean Observing System Center at AOML.

During Bob's tenure at AOML, he has served as Chief Scientist on 36 research cruises in the Atlantic Ocean, Indian Ocean, Caribbean Sea, and Gulf of Mexico. In 1990, he was awarded NOAA's Silver Medal for his work on subtropical Atlantic climate studies. His current research includes large-scale circulation of the North Atlantic Ocean with emphasis on western boundary currents. He has also studied decadal variability of the upper ocean temperature structure of the North Atlantic and its coupling to the atmosphere for climate studies.

Congratulations to Bob Molinari, NOAA's newest Senior Scientist.



Dr. Robert L. Molinari

(3) a surface drifter array that provides surface current, temperature, and meteorological data. Regional networks include the tropical atmosphere ocean (TAO) array of the international Tropical Ocean Global Atmosphere (TOGA) program, operated by NOAA's Pacific Marine Environ-

mental Laboratory, that provides upper ocean and surface meteorological data in the tropical Pacific Ocean. The NOAA networks provide approximately 30,000 of the 90,000 total surface meteorological observations available per month from VOS;

(continued on page 2)

GOOS Center

(continued from page 1)

40,000 of the 80,000 meteorological and sea surface temperature observations available per month from surface drifters; and 1,200 of the 4,000 temperature profiles available per month from VOS.

The data provided by these networks are used by NOAA's weather and climate forecast and research groups. To meet forecasting needs, the GOOS Center directs its efforts to real-time, in-situ, upper ocean and surface meteorological data required by NOAA forecasters. To meet research needs, the Center ensures the highest quality data is available for retrospective studies.

Specific Center objectives include: (1) insuring a continuous "pipeline" of data from sensor to user; (2) evaluating and implementing, after verification, new observing networks; and (3) developing new data. New products will be developed to provide a portrait of the characteristics of the upper ocean and surface atmosphere. The products will combine data from the diverse observing networks to define the state of the air/sea boundary layers.

As AOML scientists are among the scientific users of the data, we will continue analysis of the information to increase understanding of the role of the ocean in global climate. Using numerical model results to provide dynamical frameworks for analysis of the in-situ data, we will consider the in-situ data to study air-sea interactions on seasonal to decadal time-scales. Much of this research is presently directed at the relation of the North Atlantic Ocean to global climate.

It is recognized that to implement a true GOOS is beyond the financial resources of any one organization or country. Thus, an important function of the GOOS Center is to coordinate NOAA activities with other national (e.g., NASA) and international (e.g., EuroGOOS) groups to implement the necessary global networks.

For more information about
the GOOS Center
visit web site:
www.aoml.noaa.gov/phod/goos/

AOML Loves a Parade!

"Go NOAA!" shouted enthusiastic parade watchers as AOML employees and family members marched along Crandon Boulevard in their first Key Biscayne Fourth of July parade. In spite of the 90+ degree weather, approximately 15,000 people turned out for the annual event, sponsored by the Village of Key Biscayne.

AOML's stake truck was creatively transformed by employees into a red, white, and blue Fourth of July float, complete with oceanographic sampling equipment. Children of employees were given the treat of riding aboard the float as staff members, carrying NOAA signs, walked the mile-long parade route alongside the float and handed out informational brochures about AOML. For many, it was their first time in a parade. AOML director, Kristina Katsaros, surprised by the spirited support from onlookers stated, "It was rewarding to see the reception we received from the parade watchers. I was amazed."

AOML's participation in the parade was an enjoyable way to show support for the Key Biscayne community. David Palmer, a physicist for the Office of the Director, is credited with AOML's involvement. Palmer first suggested marching in the parade to Dr. Katsaros as a "fun" community outreach activity. According to Palmer, "What we really wanted to do was let people know we're involved in the community."

The Parade Committee awarded AOML a small trophy as a token of their appreciation for AOML's support and participation. Plans for a bigger and better float for next year's parade are already being discussed. The parade was followed by a Fourth of July picnic held on the grounds of the Rosenstiel School of Marine and Atmospheric Science.



AOML staff marching in the Key Biscayne Fourth of July parade.



AOML staff gathering for their first Key Biscayne Fourth of July parade.



3 ON 3 LUNCH TIME HOOPS 11:15-12:15

Contact:
Chris Landsea
(305-361-4357) or
Armando Cuervo
(305-361-4550)
for more information

OAR Positions Filled

NOAA administrator Dr. D. James Baker appointed Dr. David Evans to the position of Assistant Administrator for the Office of Oceans and Atmospheric Research (OAR) in July 1998. Ms. Mary Langlais is OAR's new Executive Director.

Farewell

Zailo Leite, a staff member of the Physical Oceanography Division's Drifting Buoy Data Assembly Center since July 1994, will be resigning from AOML on August 5, 1998. Zailo is moving to Malibu, California where he will continue his graduate studies.

Children's Books Wanted

Jules Craynock of the Ocean Acoustics Division is coordinating efforts at AOML to collect used children's books on behalf of the Boy Scouts. Local Boy Scout troops have an ongoing program to distribute used children's books to day care centers throughout Dade County. Contact Jules (305-361-4331 or craynock@aoml.noaa.gov) if you have children's books to donate or to add the name of a day care center to the Boy Scouts' distribution list.

Cameras Improve Accuracy of Wind Measurements

The Hurricane Research Division's (HRD) Tropical Cyclone Winds at Landfall project of the U.S. Weather Research Program is distributing digital cameras to National Weather Service forecast offices throughout hurricane-threatened areas of the United States and its territories. The digital cameras will assist in documenting wind exposures at automated surface observing system (ASOS) stations. Nearby trees and buildings interrupt and slow the wind measured by weather station anemometers. Digital exposure documentation will allow corrections to be made for obstacles to the wind flow at a given site. A series of eight photographs (every 45 degrees of compass heading) will be completed for over 330 ASOS stations and sent to the National Climatic Data Center (NCDC) where they will be made available on a web site.

HRD will create roughness tables for the stations, along with software that will input corrected observations into HRD's real-time hurricane wind analysis system. Wind analyses from the system are used as forecast and warning guidance by the National Hurricane Center. For more information on the project, including wind exposure images from the Opalocka Airport ASOS site, visit web site <http://www.aoml.noaa.gov/hrd/asos>.

AOML Gears Up for Hurricane Preparedness Drills

AOML will undergo hurricane preparedness drills on the following dates:

August 12, 1998: HRD, OCD, PhOD (HRD will reschedule if they are flying)
August 17, 1998: OAD

To accomplish these drills, each Division should meet to discuss the parameters of preparing the building for a hurricane. This should include specifics on where computers, data, and other important items should be stored; discussion of equipment in the warehouse and on AOML's ground floor that needs moving; duties of individuals responsible for moving government vehicles or who have other assigned lab responsibilities; etc. Each Division has a hurricane preparedness leader who will distribute emergency contact cards and collect questions and/or issues for the next hurricane preparedness meeting.

The Physical Oceanography Division will have first access to AOML's two forklifts for moving items from the warehouse to the main building. Other Divisions should work with PhOD staff and each other to schedule access to these critical pieces of equipment. There are also two pallet jacks to move pallets within the building and one pallet jack for use in the warehouse.

On Thursday, August 6, 1998, the stake truck will be positioned outside the warehouse for Divisions to throw away trash and unneeded equipment. Judy Gray will follow-up with each Division to ensure that everyone has made an effort to clean up their work areas and sections of the warehouse. A small investment of our time and energy now will have a big payoff if and when we face a hurricane warning.

HRD is on TV

Hugh Willoughby, James Franklin, and Stanley Goldenberg of the Hurricane Research Division appeared on the television program *Florida Crossroads*, broadcast July 23, 1998 on channel 17 (WLRN). The segment, entitled *Damage Control*, focused on hurricane research and hurricane preparedness.

AEROBICS CLASS

Monday • Wednesday • Friday
11:30 a.m. - 12:30 p.m.
1st Floor Conference Room

Contact Ginger Garte
for more information

(305-361-4430 or
garte@aoml.noaa.gov)

DAILY TROPICAL WEATHER DISCUSSION

WEEKDAYS: 12:30 P.M.

4TH FLOOR MAP ROOM

DURATION: APPROX. 15 MINUTES

In support of our annual Hurricane Field Program project, we have begun daily map discussions about tropical weather conditions around the world with a focus on the Atlantic basin. Each week we'll have a new volunteer to lead the discussions. Contact Chris Landsea (305-361-4357 or landsea@aoml.noaa.gov) for more information.

Travel

Mark Powell visited the National Weather Service Eastern Regional Headquarters in Bohemia, New York on June 15, 1998 and made a presentation about research conducted on landfalling hurricanes. He also provided training on how to document wind exposure at ASOS weather stations.

Warren Krug attended the Third International Buoy Programme for the Indian Ocean in Kuala Lumpur, Malaysia on July 7-9, 1998. He made a presentation about the AOML Global Drifter Center's 1997 activities in the Indian Ocean and plans for 1998. He also traveled to Cape Town and Durban, South Africa on July 10-12, 1998 to conduct training sessions on the SEAS data collection system.

Stanley Goldenberg was the keynote speaker for the Banquet of the 66th Annual Florida Association of Life Underwriters Convention and Exposition on Friday, July 10, 1998 at the Ritz-Carlton Hotel in Palm Beach, Florida.

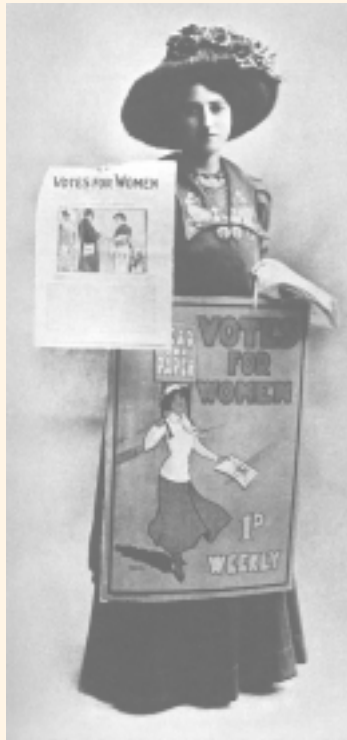
Joyce Berkeley attended the Federally Employed Women's 29th National Training Program in Washington, D.C. on July 20-24, 1998.

Kristina Katsaros attended the Fourth Pacific Ocean Remote Sensing Conference (PORSEC '98) in Qingdao, China on July 27-30, 1998.

Robert Molinari and Silvia Garzoli will attend the International Conference on Satellites, Oceanography, and Society (ICSOS) in Lisbon, Portugal on August 17-21, 1998.

Dawn Marie Welcher will attend a Coastal Metadata Management Workshop at the NOAA Coastal Services Center in Charleston, South Carolina on August 18-20, 1998.

Gustavo Goñi will attend the 1998 Japan-GLOBEC Meeting in Mutsu City and Hakodate, Japan on August 24-28, 1998 and present a keynote speech on physical oceanography.



*In celebration of our continuing efforts
towards full equality
(and the day women won the vote)*

The Federal Women's Program

presents

Women's Equality Day Luncheon

August 26, 1998

Renaissance Ballroom

\$15.00 per person

11:30 a.m. – 2:00 p.m.

Guest Speaker:

Judy Gray, AOML Deputy Director

Contact Joyce Berkeley for more information
(305-361-4309 or berkeley@aoml.noaa.gov)

Visitors

Dr. Luiz Nonato, an engineer from the University of Sao Paulo in Brazil, is at AOML working in conjunction with staff from the Physical Oceanography Division. Dr. Nonato is participating in the construction of inverted echo sounders that will be deployed in the North Brazil Current in November 1998.

Dr. Abderrahim Bentamy, a scientist from the Institute Francais de Recherche pour l'Exploitation de la Mer (IFREMER) in Plouzane, France, is at AOML working in the newly formed Microwave Remote Sensing Group. Dr. Bentamy is calculating ocean surface fluxes using passive and active satellite microwave instruments and is expected to complete his analysis in October 1998.

In Memory...



of Anastasia Bush, mother of Marc Bush, Anna Goldenberg, mother of Stanley Goldenberg, and Sylvia Ortner, mother of Peter Ortner, who all passed away between the period of July 29-August 3, 1998. Our thoughts and deepest sympathies are extended to their families and friends.

Keynotes is published monthly by the Atlantic Oceanographic and Meteorological Laboratory. Contributions are welcome and should be submitted prior to the last week of each month to ensure inclusion in the following month's edition. Please address all correspondence to Ms. Gail Derr, Office of the Director, 4301 Rickenbacker Causeway, Miami, FL 33149. Contributions may also be submitted by fax at (305) 361-4442 or by email (derr@aoml.noaa.gov). If you have comments, questions, or suggestions, feel free to send them along as well; we're always interested in hearing from you.

Editor - Kristina Katsaros
Publishing Editor - Gail Derr

The deadline for submitting material for the September issue of *Keynotes* is Friday, August 21, 1998.

Keynotes can be viewed online in PDF format at the following
Internet web site address:

<http://www.aoml.noaa.gov/od/keynotes/keynotes.html>